

Appl. No. 10/085,298  
Amdt. Dated October 17, 2005  
Reply to Office Action of September 19, 2005

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) In an embedded microcontroller based control system comprising a microcontroller having the ability to execute programs stored on a first non-volatile storage device, the embedded microcontroller based control system also having a second non-volatile storage device coupled to the microcontroller, a method comprising:

accessing a key entry stored on the second non-volatile storage device, the key entry identifying programs on the first non-volatile storage device licensed for execution on the microcontroller; and

limiting use of the programs stored on the first non-volatile storage device based on the key entry on the second non-volatile storage device.

2. (Original) The method as defined in claim 1 wherein limiting use of the programs stored on the first non-volatile storage device based on the key entry on the second non-volatile storage device further comprises limiting a number of instances of use of a first software program stored on the first non-volatile storage device.

3. (Original) The method as defined in claim 1 wherein limiting use of the programs stored on the first non-volatile storage device based on the key entry on the second non-volatile storage device further comprises limiting use of a set of software programs stored on the first non-

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volatile storage device to a version number identified in the key entry, where the set of software programs are distinguished by version number.

4. (Original) The method as defined in claim 1 wherein limiting use of the programs stored on the first non-volatile storage device based on the key entry on the second non-volatile storage device further comprises limiting use of a first software program after an expiration date identified in the key entry.

5. (Original) The method as defined in claim 1 wherein accessing a key entry stored on the second non-volatile storage device further comprises reading the key entry from the second non-volatile storage device across an interface bus.

6. (Original) The method as defined in claim 5 wherein second non-volatile storage device further comprises a read only memory (ROM) device.

7. (Original) The method as defined in claim 6 wherein reading the key entry from the ROM device across an interface bus further comprises reading a serial electrically erasable programmable read only memory (serial EEPROM) across a Serial Peripheral Interface (SPI) bus.

8. (Currently Amended) A system for selectively allowing use of embedded comprising:  
a microcontroller;

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a first non-volatile storage device coupled to the microcontroller, the first non-volatile storage device storing a plurality of programs executable by the microcontroller, the plurality of programs comprising at least a program to perform flow calculations, a program to perform PLC functions, and a program to perform RTU functions;

a second non-volatile storage device coupled to the microcontroller by way of an interface bus, the second non-volatile storage device storing software license information; and

wherein the microcontroller ~~is adapted to refrain~~ refrains from executing at least one of the plurality of programs on the first non-volatile storage device if the software license information on the second non-volatile storage device does not contain an entry allowing use.

9. (Original) The system as defined in claim 8 wherein the second non-volatile storage device further comprises a read only memory (ROM) device.

10. (Original) The system as defined in claim 9 wherein the interface bus further comprises a serial interface bus.

11. (Original) The system as defined in claim 10 wherein the ROM device further comprises a serial electrically erasable programmable read only memory (serial EEPROM).

12. (Original) The system as defined in claim 10 wherein the serial interface bus further comprises a Serial Peripheral Interface (SPI) bus.

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13. (Original) The system as defined in claim 12 wherein the serial EEPROM further comprises a part number 25LC040-I device manufactured by Microchip Technology Incorporated.

14. (Original) The system as defined in claim 10 wherein the serial interface bus further comprises an Inter-Integrated Circuit (I<sup>2</sup>C) bus.

15. (Original) The system as defined in claim 8 wherein the second ROM device further comprises a flash ROM device.

16. (Original) A gas flow measurement computer comprising:  
a microcontroller;  
a non-volatile storage device coupled to the microcontroller, the non-volatile storage device storing a gas flow measurement software program executable by the microcontroller;  
a read only memory (ROM) device coupled to the microcontroller by way of an interface bus, the ROM device storing a string of bytes that indicate a number of instances the gas flow measurement software program that may run on the microcontroller; and  
wherein the microcontroller accesses the string of bytes on the ROM device and limits the number of instances of the gas flow measurement software program to the number indicated in the string of bytes.

17. (Original) The gas flow measurement computer as defined in claim 16 wherein the

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microcontroller further comprises a Motorola® microcontroller model number MPC862SR.

18. (Original) The gas flow measurement computer as defined in claim 16 wherein the interface bus further comprises a serial interface bus.

19. (Original) The gas flow measurement computer as defined in claim 18 wherein the ROM device further comprises a serial electrically erasable programmable read only memory (serial EEPROM).

20. (Original) The gas flow measurement computer as defined in claim 19 wherein the serial interface bus further comprises a Serial Peripheral Interface (SPI) bus.

21. (Original) The gas flow measurement computer as defined in claim 20 wherein the serial EEPROM further comprises a model number 25LC040-I manufactured by Microchip Technology Incorporated.

22. (Original) The gas flow measurement computer as defined in claim 16 wherein the non-volatile storage device further comprises a read only memory device.

23. – 61. (Cancelled)